

Between lines 14 and 15, insert the heading: --Description of Related Art--;

Line 18, delete "an";

Line 19, change "matching etc.." to --matching, etc.--; and

Line 22, after "of" insert --a light--.

Page 2

Line 2, change "values, and the" to --values. The--.

Page 3

Line 2, after "in" insert --Japanese--;

Line 5, after "using" insert --a--;

Line 11, after "using" insert --a--;

Line 12, after "having" insert --a--; and

Line 21, after "on" insert --the--.

Page 4

Line 1, change "However" to --However, Japanese--;

Line 4, change "increased" to --increase--;

Line 8, change "cameras, and" to --cameras. Additionally,--;

Line 9, delete "an";

Line 17, after "line," insert --and--; and

Line 24, after "Generally" insert a comma --,--; and change "CCD" to --a CCD,--.

Page 5

Line 2, after "efficiency" insert a comma --,--;

Line 3, after "condition" insert a comma --,--; delete "and"; and change "lot etc." to --lot, etc.--;

Line 4, after "example" insert a comma --,--;

Line 7, after "of" insert --the--;

Line 11, after "Therefore" insert a comma --,--;

Line 12, after "when" insert --a--;

Line 14, change "voltage, but" to --voltage. However, in a structure that receives only low levels of light (i.e., CCD output is small),--;

Line 16, after "satisfactorily" insert a comma --,--; and change "decreased, in a" to --decreased.--;

Line 17, delete "structure which receives only low levels of light (namely";

Line 18, delete "CCD output is small). To adjust"; and before "individually" insert --Adjusting--;

Between lines 22 and 23, insert the heading --Summary of the Invention--; and

Line 24, change "problem" to --problems--.

Page 6

Lines 6-8, delete in their entirety;

Between lines 8 and 9, insert the heading --Brief Description of the Drawings--; and

Line 11, change "embodiment" to --present invention--.

Page 7

Line 17, after “sensor,” insert --with--; and

Line 18, after “illustrating” insert --the--; and after “setting” insert --of--.

Page 8

Line 8, delete “a” (second occurrence);

Line 21, after “23;” insert --and--; and

Between lines 23 and 24, insert the following:

--Detailed Description of the Preferred Embodiments

Embodiments of the invention will now be described in detail with reference to the accompanying drawings.--.

Page 9

Line 7, after “1” insert a comma --,--;

Line 8, delete “etc.”; and after “displaying” insert --an--; and

Line 16, change “45,” to -- 45 (Figure 1),--.

Page 10

Line 6, after “References” insert --herein--; and

Line 25, after “10” insert a comma --,--.

Page 11

Line 5, after "computer" insert --200--;

Line 7, after "programs" insert a comma --,--;

Line 14, change "3A analyses" to --3A, analyzes--;

Line 15, after "information" insert a comma --,--;

Line 18, after "or" insert --it--; and

Line 25, change "with" to --from the--.

Page 12

Line 2, after "memory" insert a comma --,--;

Line 3, change "where" to --designated by--;

Line 4, delete "designates";

Line 10, change "but" to --but, as shown in Figure 4,--; and

Line 17, change "lens." to --lens 86.--.

Page 13

Line 18, change "100" to --200--; and after "the" (second occurrence) insert --image--; and

Line 22, change "screen," to --screen 10,--.

Page 14

Line 2, after "42" insert --(Figure 2)--;

Line 9, change “designated” to --designation--; and

Line 13, change “41,” to --41 thereby--.

Page 16

Line 4, after “structure” insert --of--; and after “apparatus” insert --8--;

Line 7, after “apparatus” insert --8--;

Line 12, change “projects” to --project--;

Line 21, change “110” to --10--;

Line 23, after “system” insert --108--; and

Line 25, change “elongate” to --elongated--.

Page 17

Line 4, after “components” insert a comma --,--;

Line 5, change “41” to --141--;

Line 6, after “portion” insert --146--; and

Line 15, change “1” to --100--; and delete “the” (first occurrence).

Page 18

Line 19, after “shown” insert --in--.

Page 19

Line 7, after “i.e.” insert a comma --,--; and

Line 15, change "5," to --5 or 105,--.

Page 20

Line 8, after "above" insert a comma --,--;

Line 10, after "42" insert --or 142--;

Line 17, delete "a" (second occurrence); and

Line 25, after "Alternatively" insert a comma --,--.

Page 21

Line 3, after "4" insert --or 140--;

Line 5, after "attributes" insert a comma --,--;

Line 6, change "etc" to --etc.--; and

Line 24, after "to" insert --the--.

Page 22

Line 6, after "that" insert a comma --,--;

Line 7, change "signal etc." to --signal, etc.,--;

Line 15, after "of" insert --the--; and

Line 19, change "detection," to --detection--.

Page 23

Line 1, after "present" insert a comma --,--; and

Line 17, after “bits” insert --in--.

Page 24

Line 2, change “etc..” to --etc.--;

Line 3, after “however” insert a comma --,--;

Line 5, after “60 kHz” insert a comma --,--;

Line 9, after “of” insert --the--;

Line 11, after “bits” insert --of--; and

Line 12, after “Therefore” insert a comma --,--.

Page 25

Line 19, change “means 3,” to --unit 31,--.

Page 26

Line 1, after “lens” insert --6a--;

Line 5, change “detection output” to --luminous energy--;

Line 20, after “Therefore” insert a comma --,--; and

Line 22, change “seen” to --shown--.

Page 27

Line 10, change “telephone” to --or telephone,--;

Line 13, after “as” insert --a--;

Line 14, after "Internet," insert --or--;

Line 15, change "Input" to --The input--;

Line 16, change "for controlling" to --controls--; after "input" insert a comma --,--;

and after "and" (second occurrence) insert --the--;

Line 17, change "for controlling" to --controls--;

Line 19, change "corresponds" to --correspond--; and

Line 24, change "the" (first occurrence) to --that--.

Page 28

Line 6, change "the" to --that--; and

Line 16, change "then" to --and--.

Page 29

Line 6, after "without" insert --the--;

Line 11, change "kHz that" to --kHz, which--;

Line 20, change "analysed" to --analyzed--; and

Line 21, after "72" insert a comma --,--.

Page 30

Line 2, change "sensor" to --sensors--;

Line 3, after "of" insert --the--;

Line 9, change "designating" to --designation--;

Line 11, after "LON" insert --and--;

Line 14, after "level" insert a comma --,--;

Line 18, after "signal" insert --and--;

Line 20, change "It" to --The signal--;

Line 23, after "showing" insert --that--; and

Line 24, after "level" insert a comma --,--.

Page 31

Line 5, change "keeps" to --stay at a--;

Line 7, after "level" insert a comma --,--;

Line 13, change "(91X, 91Y)" to --91X, 91Y--;

Line 18, change "(21X, 21Y)" to --21X, 21Y--;

Line 19, change "a" to --an--; and

Line 24, change "31, the" to --307. The--.

Page 32

Line 18, after "embodiment," insert --the--;

Line 21, after "sensor" insert a comma --,--;

Line 22, change "plastics" to --plastic--; and

Line 25, change "degree" to --degrees--.

Page 33

Line 1, change "40°" to --(40°),--;

Line 3, after "of" insert --the--; and change "as" to --so that--;

Line 6, change "then" to --but--;

Line 12, before "optical" insert --a small--;

Line 16, after "sensor" insert --20Y--;

Line 17, after "in" insert --an--.

Page 34

Line 6, after "stores" insert --an--;

Line 9, after "pixel" insert a comma --,--;

Line 18, after "Therefore" insert a comma --,--; and

Line 19, after "in" insert --a--.

Page 35

Line 5, after "i.e." insert a comma --,--;

Line 17, after "in" insert --a--; and after "i.e." insert a comma --,--; and

Line 24, after "obtained" insert a comma --,--.

Page 36

Line 4, after "i.e." insert a comma --,--;

Line 5, before "charge" insert --a--; and after "together" insert --the--; and

Line 10, after “period” insert a comma --,--; and after “and” insert --if--.

Page 37

Line 3, after “Therefore” insert a comma --,--;

Line 4, change “(n+1th)” to --(n+1)th--; and after “subtracting” insert --the--;

Line 7, change “flash” to --flashing--;

Line 12, after “added” insert a comma --,--;

Line 24, after “if” insert --the--; and

Line 25, after “in” insert --a--.

Page 38

Line 1, after “second” insert --rather--;

Line 4, after “first” insert a comma --,--;

Line 8, delete “sets”; and after “n” insert --is set--;

Line 9, change “S103 and” to --S103. The sensor control unit 31--; and after “of” insert --the--; and

Line 19, change “n0” to n0, and--.

Page 39

Line 2, before “low” insert --a--;

Line 3, after “in” insert --a--;

Line 4, change “LCK(step)” to --LCK (step--; and after “that” insert a comma --,--;

Line 5, after "S112" insert a comma --,--;

Line 6, after "level" insert a comma --,--;

Line 9, delete "a condition against";

Line 10, after "CON" insert --from--;

Line 13, after "0" insert a comma --,--; and after "and" insert --the flow--;

Line 19, after "of" insert --the--;

Line 20, after "CON" insert a comma --,--; and

Line 21, after "used" insert a comma --,--.

Page 40

Line 8, after "of" insert --the--;

Line 17, after "input" insert a comma --,--;

Line 22, after "energy" insert a comma --,--; and

Line 23, change "numbers" to --number--.

Page 41

Line 12, after "light" insert a comma --,--;

Line 16, after "condition" insert a comma --,--;

Line 20, change "steps" to --stepping--; and change "responding with" to --in response to--; and

Line 23, after "of" insert --the--.

Page 42

Line 2, change “time.” to --times.--;

Line 4, change “is” to --has--;

Line 5, change “responding” to --in response--;

Line 7, change “change” to --changes--;

Line 8, change “responding” to --in response--;

Line 12, after “element” insert a comma --,--;

Line 17, before “bigger” insert --a--;

Line 18, after “However” insert a comma --,--;

Line 20, after “namely” insert --in--; and

Line 21, after “time,” insert --and--.

Line 43

Line 7, change “realised” to --realized--;

Line 10, change “that, then” to --that purpose, and--;

Line 15, change “29)” to -- 29 in Figure 6)--;

Line 18, change “means” to --unit--; and after “and” insert --a--;

Line 19, after “first” insert a comma --,--; and change “coordinate” to --coordinates--;

Line 20, change “on” to --of--; and before “X” insert --the--;

Line 21, after “and” insert --the--; and

Line 23, after “to” insert --the--.

Page 44

Line 4, change "S201 at first." to --S201.--;

Line 5, after "in" insert --the--; and after "(as" insert --described--;

Line 10, after "of" insert --a--;

Line 11, change "(predetermined" to --(a predetermined,--;

Line 12, after "as" insert --described--; and change "got" to --obtained--;

Line 14, after "V" insert a comma --,--;

Line 15, after "and" insert --a--; and after "Ex(n)" insert a comma --,--;

Line 16, after "value" insert a comma --,--; and

Line 21, after "embodiment" insert a comma --,--.

Page 45

Line 5, delete "The matter about X direction is described.";

Line 15, after "In" insert --the--;

Line 18, change "or" to --of--;

Line 19, change "S210" to --step S206--;

Line 21, after "done" insert a comma --,--; and

Line 23, after "because" insert --a--.

Page 46

Line 7, after "example" insert a comma --,--;

Line 12, change "as" to --using--; and

Line 19, after “Since” insert --an--.

Page 47

Line 7, after “compressed” insert a comma --,--;

Line 11, change “optimise” to --optimize--;

Line 14, change “msec” to --msec, and--;

Line 15, after “data” insert a comma --,--;

Line 17, after “bits’ insert a comma --,--; and

Line 18, change “micro processor” to --microprocessor--.

Page 48

Line 2, after “by” insert --the--;

Line 9, after “Therefore” insert a comma --,--;

Line 12, delete “and”;

Line 16, change “wherein” to --having--; and

Line 24, after “in” insert --the--; and change “2 dimensional” to --2-dimensional--.

Page 49

Line 6, after “of” insert --a--;

Line 12, after “However” insert a comma --,--;

Line 14, after “words” insert a comma --,--; and

Line 23, delete “obtain”; and after “signals” insert --are obtained--.

Page 50

Line 2, change “can” to --to--; and change “obtained, the” to --obtained. The--;

Line 3, after “reduced” insert a comma --,--;

Line 7, change “Dx” to --Dx(n)--;

Line 8, delete “(n)”;

Line 11, before “coordinate” insert --the--; and

Line 22, after “increased” insert a comma --,--.

Page 51

Line 5, after “only” insert --a--;

Line 6, after “reach” insert --the--;

Line 10, change “and” to --an--; and after “increasing” insert --the--;

Line 14, after “However” insert a comma --,--; and

Line 16, change “it is” to --but these sources are--.

Page 52

Line 9, after “from” insert --the--;

Line 10, after “condition” insert --that--;

Line 13, after “of” insert --the--; and

Line 15, change “to” to --on--.

Page 53

Line 3, after “embodiment)” insert a comma --,--;

Line 5, after “point” insert a comma --,--; and

Line 7, after “S311” insert a comma --,--.

Page 54

Line 2, after “above” insert a comma --,--;

Line 8, after “and” insert --also illustrates--;

Line 10, after “(i.e.” insert a comma --,--;

Line 15, before “obtained” insert --is--;

Line 17, after “axis” insert a comma --,--;

Line 20, after “points” insert a comma --,--; and

Line 24, after “set” insert --to--.

Page 55

Line 1, after “is” insert --the--;

Line 3, change “caused by” to --because of--;

Line 6, after “levels” insert a comma --,--;

Line 9, after “areas” insert a comma --,--;

Line 12, after “operation” insert a comma --,--;

Line 13, after “small” insert a comma --,--;

Line 15, after “period” insert a comma --,--; and

Line 18, after “making” insert --the--; and change “emitting” to --emitted--.

Page 56

Line 3, after “Next” insert a comma --,--;

Line 4, after “where” insert --the--;

Line 5, delete “and” (first occurrence);

Line 6, after “selected” insert a comma --,--;

Line 15, after “set” insert --at--; and change “Dx (“ to --Dx(--;

Line 16, after “Next” insert a comma --,--;

Line 17, change “is” to --are--;

Line 20, after “signal” insert --output at pixel n--;

Line 21, change “level” to --level.--; and delete “is output at pixel n.”; and

Line 22, after “value” insert --that is--.

Page 57

Line 3, after “Therefore” insert a comma --,--; and delete “a”;

Line 4, delete “little”; and after “Then” insert a comma --,--;

Line 8, after “pixels” insert a comma --,--;

Line 12, after “changeable” insert a comma --,--;

Line 15, after “Next” insert a comma --,--; and

Line 25, after “above” insert a comma --,--.

Page 58

Line 5, before “coordinate” insert --a--;

Line 6, before “X” insert --The--;

Line 7, change “corresponding” to --correspond--;

Line 8, after “4,” insert --and the--; and after “between” insert --the--;

Line 11, delete “being”;

Line 16, after “calculation” insert --made in--;

Line 17, after “However” insert a comma --,--;

Line 21, after “Also” insert a comma --,--;

Line 22, after “generated” insert a comma --,--;

Line 23, change “It” to --This--; and

Line 25, after “16” insert a comma --,--.

Page 59

Line 3, after “of” insert --the--;

Line 12, after “by” insert a comma --,--; and after “example” insert a comma --,--;

Line 19, after “of” insert --a--;

Line 21, after “in” insert --the--;

Line 22, after “in” insert --the--; and

Line 24, change “detected, the” to --detected. The--.

Page 60

Line 5, after "value" insert a comma --,--;

Line 7, after "Therefore" insert a comma --,--;

Line 14, after "light" (first occurrence) insert a comma --,--;

Line 21, after "in" insert --a--;

Line 22, after "in" insert --a--; and

Line 23, change "%" to --percent--.

Page 61

Line 3, after "in" insert --a--;

Line 6, after "in" insert --a--;

Line 7, delete "be";

Line 8, after "Namely" insert a comma --,--;

Line 11, after "low" insert a comma --,--;

Line 14, after "in" insert --a--;

Line 18, change "the" to --this--;

Line 20, after "S501" insert a comma --,--;

Line 21, after "embodiment)" insert a comma --,--;

Line 22, after "point" insert a comma --,--; and

Line 24, after "calculated" insert a comma --,--.

Page 62

Line 1, change "S 503)" to --S503)--;

Line 5, after "sensor" insert a comma --,--; and after "level" insert a comma --,--;

Line 6, after "in" insert --a--;

Line 7, after "considered" insert a comma --,--;

Line 9, after "Next" insert a comma --,--;

Line 11, after " $(Dx(n_{\text{peak}}+m))$ " insert a comma --,--;

Line 13, after " n_{peak} " insert a comma --,--; and after "obtained" insert a comma --,--;

Line 14, after "Next" insert a comma --,--;

Line 18, after "and" insert a comma --,--;

Line 19, after ""13(C)" insert a comma --,--; and delete "Dx";

Line 20, change $(n_{\text{peak}}-m).$ to --Dx $(n_{\text{peak}}-m).$ --; and

Line 24, after "Next" insert a comma --,--.

Page 63

Line 2, after "Vth1" insert a comma --,--;

Line 5, after "However" insert a comma --,--;

Line 7, delete "and"; and after "stops" insert a comma --,--;

Line 10, after "S509" insert a comma --,--;

Line 11, after "Next" insert a comma --,--;

Line 12, after "exceeding" insert --the--;

Line 13, after "S510" insert a comma --,--;

Line 15, after "methods" insert a comma --,--;

Line 16, after "used" insert a comma --,--;

Line 24, after "changeable" insert a comma --,--; and

Line 25, before "calculation" insert --the--.

Page 64

Line 5, after "Figure," insert --because--;

Line 6, delete "then";

Line 7, change "detection" to --detected--; and

Line 8, delete "is".

IN THE ABSTRACT OF THE DISCLOSURE:

Page 156

Line 3, delete "Position Information Input Apparatus and Method";

Line 7, change "and," to --and--;

Line 11, change "comprises" to --includes--;

Line 12, change "means" to --device--;

Line 15, after "in" insert --a--;

Line 16, after "in" insert --a--; and

Line 17, change "found" to --found,--.